Electronic Version
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Claims

[c1] What is claimed is:

1.A feed-and-eject disc device of an optical disc drive, comprising:

a housing having an opening;

a driving device for feeding a disc into the housing or ejecting the disc to a pickup position through the opening; and

a logic unit for controlling the driving device to feed the disc into the housing when the time in which the disc has stayed at the pickup position reaches a predetermined time.

[c2] 2.The feed-and-eject disc device of the optical disc drive of claim 1, further comprising a photosensor for detecting whether the disc is located at the pickup position.

[c3] 3.The feed-and-eject disc device of the optical disc drive of claim 1, wherein the logic unit is a hardware circuit or software code stored in a memory.

[c4] 4.The feed-and-eject disc device of the optical disc drive of claim 1, wherein the disc is a CD-R disc, a CD-RW disc, a DVD-R disc, a DVD+R disc, a DVD-RW disc, a

DVD+RW disc, or a HD-DVD disc.

[c5] 5.The feed-and-eject disc device of the optical disc drive of claim 1, wherein the driving device further comprises a tray for supporting the disc to feed the disc into the housing or to eject the disc to the pickup position.

[c6] 6.A method for controlling an optical disc drive to feed and to eject a disc comprising:
when a disc is ejected to a pickup position, starting to count a time in which the disc stays at the pickup position; and
when the time in which the disc has stayed at the pickup position reaches a predetermined time, feeding the disc into the optical disc drive.

[c7] 7.The method of claim 6, wherein the disc is a CD-R disc, a CD-RW disc, a DVD-R disc, a DVD+R disc, a DVD-RW disc, a DVD+RW disc, or a HD-DVD disc.

[c8] 8.The method of claim 6, wherein the optical disc drive is used for driving a tray to eject to the pickup position.

[c9] 9.An feed-and-eject tray device of an optical disc drive, comprising:
a housing having an opening;
a tray for supporting a disc;
a tray-driving device for feeding the tray into the hous-

ing or ejecting the tray to a pickup position; and
a logic unit for controlling the tray-driving device for feed the tray into the housing when the time in which the tray has stayed at a pickup position reaches a predetermined time.

[c10] 10.The feed-and-eject tray device of the optical disc drive of claim 9, further comprising a photosensor for detecting whether the disc is at the pickup position.

[c11] 11.The feed-and-eject tray device of the optical disc drive of claim 9, wherein the logic unit is a hardware circuit or software code stored in a memory.

[c12] 12.The feed-and-eject tray device of the optical disc drive of claim 9, wherein the disc is a CD-R disc, a CD-RW disc, a DVD-R disc, a DVD+R disc, a DVD-RW disc, a DVD+RW disc, or a HD-DVD disc.

[c13] 13.A method for controlling an optical disc drive to feed and to eject a tray comprising:
when a tray is ejected to a pickup position, starting to count a time in which the tray stays at the pickup position; and
when the time in which the tray has stayed at the pickup position reaches a predetermined time, feeding the tray into the optical disc drive.

[c14] 14.The method of claim 13, wherein the disc is a CD-R disc, a CD-RW disc, a DVD-R disc, a DVD+R disc, a DVD-RW disc, a DVD+RW disc, or a HD-DVD disc.